



APPLICATION  
TO  
ALTER A NATURAL  
STREAM

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PARAHO DEVELOPMENT CORPORATION  
Grand Junction, Colorado 81501

## APPLICATION TO ALTER NATURAL STREAM

Note: Information given in the following blanks should be free from explanatory matter, but when necessary, a complete supplementary statement should be made under the heading "Explanatory".

For the purpose of acquiring permission to alter a natural stream channel, application is hereby made to the State Engineer, based on the following facts, submitted in accordance with the requirements of the laws of the State of Utah, Section 73-3-29, Utah Code Annotated 1953, as amended.

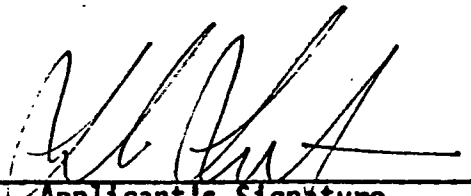
1. Relocate ☐ Revetment Work ☐ Change ☐ Divert Stream Flow ☒
2. Name of applicant PARAHO DEVELOPMENT CORPORATION
3. Address of applicant 300 Enterprise Building, Third and Main Streets,  
Grand Junction, Colorado 81501
4. The stream to be altered or relocated is Unnamed dry drainage
5. The channel to be altered is in the drainage area of White River
6. The location of the channel to be altered is in Uintah County.  
Located in Township 10 South, Range 25 East, SE $\frac{1}{4}$  of NW $\frac{1}{4}$  of Section 6  
(Give location within 40-acre tract of section, township, and range.)
7. The nature of the proposed channel change is a diversion cut to  
prevent impoundment of precipitation runoff
8. The alteration or relocation is made for the purpose of providing a  
means of diverting precipitation runoff from the drainage areas north-  
west of the retorted shale disposal pile. Runoff waters are carried  
into an adjacent drainage leading to the White River.
9. The existing condition of the channel is dry except during precipitation  
events.
10. The estimated streamflow is zero second-feet.
11. The description of the proposed work involved is an approximately 1,500-  
foot long open-cut channel, about 20 feet wide at the base and 130 feet  
deep at the maximum section. The diversion cut wall slope will be 45 $^{\circ}$   
which amounts to an excavation requirement of approximately 307,000  
cubic yards. Excavated materials will be stored and reused for riprap  
on the retorted shale disposal pile.
12. Is the land owned by the applicant? Yes ☐ No ☒ If the answer is  
"No", has written permission to proceed with the work been obtained?  
See Explanatory Note

Note: The approval of this application does not grant the applicant the right of egress or trespass. Such authorization must be accomplished in accordance with the standard legal procedures.

13. Channel Improvement Grouping (for federal agencies only) \_\_\_\_\_

Include below a diagram or sketch of the channel changes proposed.

May 17, 1982  
Date

  
Applicant's Signature  
Larry A. Lukens, President

Recommendations of Area Engineer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Conditions

1. This application is rejected for the following reasons: \_\_\_\_\_  
\_\_\_\_\_

## Form 93: Application to Alter Natural Stream

Explanatory Note:

Paraho Development Corporation (Paraho) plans to construct and operate an approximately 42,500 barrel per day commercial shale oil production facility to be located on a site in Uintah County, Utah. The project site is 1,416 acres; 582 acres are state-owned, and 834 acres are privately-owned. Paraho was assigned State Mineral Lease No. 35894 on February 23, 1979 for oil shale extraction on the 582-acre site in Section 32 (T9S, R25E). An adjoining tract (portions of Sections 5, 6 and 7 in T10S, R25E) owned by Skyline Oil Company and leased to Sohio Shale Oil Company has been sub-leased to Paraho (see attached map).

The mine entrance and shale processing facilities will be located on Section 32. Retorted shale from which the oil has been extracted will be disposed of in Section 6. The dry drainage bisecting Section 6 will necessarily be blocked, requiring the diversion of runoff into an adjacent drainage to ensure the protection of existing water rights and surface water quality in the White River.

As shown on the attached map, a diversion cut will be constructed to pass all storm water without any storage impoundments from drainage area "A" (north of the retorted shale pile) to drainage area "B" and thence by an existing natural drainage channel to the White River. The cut has been designed with the capacity to accommodate

the 100-year, 24-hour storm of 2.4 inches and the probable maximum precipitation storm of 9.32 inches.

Fish and wildlife resources and recreational activities in the vicinity are not anticipated to be affected by the diversion cut.

The diverted runoff water will cross lands administered by the Bureau of Land Management (Sections 1 and 12, T10S, R24E). Discussions have been held with BLM regarding the change in water course.

The diverted runoff water will also cross a privately-owned pipeline right-of-way in the southeastern corner of Section 1 (T10S, R24E). Paraho will obtain the written permission of the pipeline owner. If necessary, a short section of the drainage will be adequately protected at the point of intersection of the buried pipeline.